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BLACK LOCUST

BLACK LOCUST PLANTATION

Trees 8 Years Old Planted 6x6 Feet.

MARYLAND STATE BOARD OF FORESTRY
BALTIMORE, MARYLAND.

BLACK LOCUST (Yellow Locust)
(Robina pseudacacia)

The black or yellow locust as it is often called, is a familiar sight along roads and fence rows throughout the State. In the forest it is found in the midland and mountain section in mixture with other hardwoods, though forming but a small percentage of the stands. On account of its adaptability to nearly all kinds of soils, its rapidity of growth, and the general usefulness of its wood, it is a species well deserving of consideration for forest planting.

Range.

Originally, locust was confined to the forests of Western Maryland. Today, it is found practically all over the State, due to the seed distribution and root suckering from thousands of planted specimens.

Characteristics.

The locust, when forest grown, is fairly straight, clean and free from branches for a considerable distance above the ground, though showing a marked tendency to fork. Open grown specimens usually branch low, forming a low-spreading crown.

The leaves are compound, with 7 to 9 leaflets, and give a feathery appearance to the tree.

In June the long clusters of fragrant white blossoms are very characteristic. The pods which later develop are thin and numerous, and contain many black, bean-like seeds.

The bark on young trees is a smooth grayish brown, which soon becomes broken into rough, irregular, flat-topped ridges, with deep furrows between, and is of a reddish brown color.

Small thorns or spines are borne in pairs at the nodes, and provide an easy means of identification.

Soil And Moisture.

Deep, moist, fertile loam soil, such as is found on bottom lands, and along mountain streams, is where the black locust makes its best growth; it does especially well on limestone soils. With the exception of the saturated soils of the swamps, however, it will be found growing under a wide range of conditions, including thin soiled, rocky, mountain slopes.

Enemies.

Considerable damage to locust throughout Maryland, has been caused by an insect known as the locust borer. The adult beetle deposits eggs in the wood of branches and even the main stem of very young trees, and the larva that hatch out bore their way to the center of the branch, and in the process of developing into a full grown grub, make quite a large cavity. The wind often breaks off the branches at such weak points and even if not broken, the hole and swelling around it, permanently mar the tree. It has been found that the damage from this insect is not so serious where the locust is growing in company with other species. In making plantations of locust, therefore, it will be advisable to alternate the rows with such species as white pine.*

When all the leaves of the locust turn brown early in August one can be sure that the locust leaf miner is at work. This tiny insect eats the green coloring matter out of the leaves, and gives the brown, seared appearance to the foliage. It is not possible to check the work of this insect, but, on the other hand, the damage it does in any one year is relatively slight.

The heartwood of the locust is very susceptible to attack by a heart-rot fungus, and it is very rare indeed to see a tree 15 inches in diameter, or over, which does not have one or two punk knots on its trunk as a sure indication of an advanced stage of heartwood decay. This means that the locust should be utilized before the trees are 12 inches in diameter at the breast-high point. (4½ feet from the ground).

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*An excellent example of such mixture is found on the Baltimore City watershed at Loch Raven.

Uses Of The Wood.

The wood of the black locust is heavy, hard, very strong, coarse grained and stiff. It is very durable in contact with the soil. It is largely used in Maryland for fence posts. Other uses are for tree nails, insulator pins, railroad ties, and fuel. This species will be grown largely to furnish a supply of farm timbers, particularly fence posts. Excess supplies of locust will be sold for railroad ties or insulator pins.

Suitability For Planting.

With the practical extinction of chestnut as a commercial species, more and more consideration will have to be given to the locust as a wood for fence posts. For reasons already given it is not advisable to plant it in pure stands, but in mixture. On account of its rapid growth it can be cut for posts in about 20 years, while its associates, such as white pine, can continue as a pure stand for another 20 years.

Being a member of the pea family nitrogen fixing bacteria will be found on its roots, and for that reason it can be planted next to agricultural crops without robbing the soil. In fact, impoverished farm soils can very profitably be built up by growing one crop of locust.

Its strong root system and rapid growth make this species desirable for planting on steep hillsides and in gullies where it is desired to check erosion.

Yields And Returns.

The locust has not been planted sufficiently long in Maryland to give data on the cost of growing and the amount of returns received on the average acre. Results of experiments in other states indicate stumpage value in normal times of $200, and more, for the average acre. Maryland lands should equal and better this figure. [Fence posts can easily be grown in 20 years, when the trees will average 5 to 6 inches in diameter with a height of 40 to 50 feet.]

Note:—The State Board of Forestry maintains a forest nursery where trees suitable for forest planting are grown and distributed at cost to landowners of the State. Full particulars may be obtained upon application.